

**B. Claims 1-10 Are Not Made Obvious By Koole U.S. Patent 5,308,085, Burns U.S. Patent 4,153,247, Senoh U.S. Patent 4,122,451, and Gordon U.S. Patent 1,998,454.**

Independent claims 1 and 10 are each directed to a method of adjusting the height of a volleyball net. Claims 1 and 10 require, *inter alia*, tensioning the net-supporting cable to a net-supporting tension which is sufficiently great that the elevation of the first and second ends of the net's upper edge margin does not exceed the elevation of the mid-point of the net's upper edge margin by more than approximately 3/4" (2 cm) when the first and second ends of the net's upper edge margin are at approximately the same elevation, and moving the upper post sections of the first and second net standards between their raised and lowered positions ***without reducing the tension of the cable below the net-supporting tension.*** The Koole, Burns, Senoh and Gordon patents, whether considered together or apart, fail to disclose or suggest these requirements of claim 1. In particular, these patents fail to disclose or suggest a volleyball net height adjusting method in which a net-supporting cable is tensioned to the net-supporting tension specified in claim 1 and then moving the net standards between their raised and lowered positions without reducing the tension of the cable below the net-supporting tension.

In rejecting claim 1-10, the Office appears to rely solely on the Koole and Burns patents. Although the Office mentions the Senoh and Gordon patents, the Office has not indicated what aspects, if any, of the Senoh and Gordon patents are being relied upon for the rejection. Thus, the sole ground for the rejection of these claims is based on the Koole and Burns patents.

To present a *prima facia* case of obviousness of claims 1 and 10, the Office must show (a) structure capable of performing the claimed method, and (b) evidence at least suggesting the performance of the method. The Office has shown neither. The Office asserts that the assemblage of a game net post structure having some of the features disclosed in the Koole patent and some of the features disclosed in the Burns patent would somehow

result in the performance of the steps required by Applicant's claims<sup>1</sup>. However, it is doubtful that the game net post structure asserted by the Office is even capable of being moved between raised and lowered positions if the net cable were tensioned to the extent required by Applicant's pending claims. If the net cable were so tensioned, the friction between the upper and lower pipe pieces would be so great that one could not pull on Koole's handle 4 with sufficient force to raise or lower the standards. Thus, the asserted structure is not capable of performing the steps required by Applicant's pending claims. Additionally, nothing in the Koole and/or Burns patents suggests Applicant's claim requirement of tensioning a net cable and then moving the net standards between raised and lowered positions without reducing the tension of the net cable. Because the Office has not shown that the asserted structure is capable of performing the claimed method and because the Office has presented no evidence even suggesting the performance of the claimed method, the rejection of the pending claims should be withdrawn.

Claims 2-9 depend from claim 1 and are therefore allowable for the same reasons as claim 1. Claim 9 further requires changing the height of the mid-point of the net's upper edge margin from about 7 feet, 4 1/8 inches to about 7 feet, 11 5/8 inches without reducing the tension of the cable below the net-supporting tension. The prior art of record fails to disclose or suggest this additional requirement of claim 9. For this additional reason, the rejection of claim 9 should be withdrawn.

As indicated above, it appears that the patents to Senoh and Gordon do not take part in the rejection of claims 1-10. Regardless, the Senoh and Gordon patents, whether

---

<sup>1</sup> The Office appears to argue that the mere assemblage of the Koole structure would satisfy the requirements of Applicant's claims. However, a person using the Koole structure could certainly raise or lower the standards without any tension being on the net cable. Thus, the mere assemblage of the Koole structure does not satisfy the requirements of any pending claim. There is no disclosure or suggestion for moving the Koole standards when the net cable is tensioned as required by Applicant's claims.

considered alone or in combination with any of the other prior art references of record, fail to disclose or suggest the methods claims in Applicant's pending claims. Thus, the rejection of the pending claims should be withdrawn.

**C. Newly Added Claims 19 and 20 Are Patentable Over The Prior Art Of Record.**

Newly added claims 19 and 20 depend from claim 10 and are therefore allowable for the same reasons as claim 10.

**D. Conclusion.**

Claims 11-18 have been cancelled without prejudice. Thus, the rejections of these claims are moot. For the reasons discussed above, the pending claims are patentable over the art of record. Thus, Applicant requests the Office to enter a notice of allowance.

Respectfully submitted,



Alan H. Norman  
Reg. No. 32,285  
One US Bank Plaza  
St. Louis, Missouri 63101-1693  
(314) 552-6284  
(314) 552-7284 Facsimile

October 4, 2002



MARKED-UP VERSION OF REPLACEMENT PARAGRAPH

In operation, the first and second net standards 24, 26 are inserted into the post-receiving sleeves 48 on opposite sides of a volleyball court. The sleeves 48 are preferably spaced apart a distance of at least 32 feet. More preferably, the sleeves 48 are spaced apart a distance of 36 feet with each sleeve being 3 feet from the sideline of the court so that the standards 24, 26 are 3 feet from the sideline of the court. When properly positioned in the sleeves 48, the standards 24, 26 extend up from the floor F in a generally upright manner, preferably so that each post axis X is vertically oriented. With the net-supporting cable [38] 28 extending through the cable-receiving sleeve 36 of the net 22, the first end of the cable is releasably attached to the tensioning strap 80 of the winch mechanism and the second end of the cable is releasably attached to the upper post section 42 of the second net standard 26 via a strap 88. The net-supporting cable [38] 28 is positioned so that the cable is between the two pulleys 54 of the upper post sections 42. The net's upper edge margin 30 has first and second ends 90, 92 (Fig. 1) and a mid-point 94 midway between the first and second ends. With the two pulleys 54 preferably at the same elevation, the winch 78 is operated in a manner to tension the net-supporting cable [38] 28 to a net-supporting tension which is sufficiently great so that the first and second ends 90, 92 of the net's upper edge margin 30 does not exceed the elevation of the mid-point of the net's upper edge margin by more than approximately 3/4" (2 cm) when the first and second ends of the net's upper edge margin are at approximately the same elevation. Preferably, the distance between the two ends 90, 92 is at least 29.5 feet, and is more preferably 30 feet. The net-supporting cable [38] 28 is preferably tensioned to this extent to meet the tension requirements of the volleyball regulations. After tensioning of the net-supporting cable [38] 28, the lower cable 84 and the side margins 34 of the net 22 are tensioned by hand-tensioning the hand-adjustable straps. Thus, the net may be tensioned in this manner to

satisfy the net requirements of the volleyball regulations. With the net so tensioned, the drive mechanisms 44 of the first and second standards 24, 26 are operated to move the net 22 to the desired height. For example, if the net is to be used for men's volleyball, the drive mechanisms 44 are operated to move the tensioned net to a height of 7 feet, 11 5/8 inches above the floor F as measured from the midpoint 94. If the net is to be used for women's volleyball, the drive mechanisms 44 are operated to move the tensioned net to a height of 7 feet, 4 1/8 inches above the floor F as measured from the midpoint 94. If the net is to be used for children to play volleyball, the drive mechanisms 44 may be operated to move the tensioned net to even a lower height. Preferably, the net's height may be adjusted in this manner between heights of 6 feet to 8 feet. Thus, the net's height may be lowered or raised without reducing the tension of the cable below the net-supporting tension.



MARKED-UP VERSION OF AMENDED CLAIMS

Claim 10 (amended). A method of adjusting the height of a volleyball net comprising: securing first and second net standards to a support surface, such as a floor, in a manner so that the net standards extend up from the support surface in a generally upright position, each net standard comprising a lower post section, an upper post section slidably connected to the lower post section for telescoping movement of the upper post section relative to the lower post section along a post axis between a raised position and a lowered position, and a drive mechanism operable to move the upper post section between its raised and lowered positions;

providing a net and cable assembly comprising a net and a net-supporting cable, the net having an upper edge margin and a cable-receiving sleeve at its upper edge margin, the upper edge margin having first and second ends and a mid-point midway between the first and second ends, the net-supporting cable extending through the cable-receiving sleeve of the net;

operatively connecting the net-supporting cable to the upper post sections of the first and second net standards in a manner so that the net is between the first and second net standards and extends downward from the net-supporting cable;

providing a tensioning mechanism on the upper post section of the first net standard; using the tensioning mechanism to tension the net-supporting cable between the upper post sections of the first and second net standards to a net-supporting tension which is sufficiently great that the elevation of the first and second ends of the net's upper edge margin does not exceed the elevation of the mid-point of the net's upper edge margin by more than approximately 3/4" (2 cm) when the first and second ends of the net's upper edge margin are at approximately the same elevation;

TC  
100 MA  
R.R.  
OCT 22 2002

RECEIVED

operating the drive mechanism of the first net standard to move the upper post section of the first net standard between its raised and lowered positions without reducing the tension of the cable below the net-supporting tension, and to move the tensioning mechanism therewith; and

operating the drive mechanism of the second net standard to move the upper post section of the second net standard between its raised and lowered positions without reducing the tension of the cable below the net-supporting tension.